



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,088	07/14/2003	Mark E. Steen	AM00007	4690
30438	7590	01/14/2009 SMYRSKI LAW GROUP, A PROFESSIONAL CORPORATION 3310 AIRPORT AVENUE, SW SANTA MONICA, CA 90405		
		EXAMINER KOHARSKI, CHRISTOPHER		
		ART UNIT 3763		PAPER NUMBER
		MAIL DATE 01/14/2009		DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/619,088	STEEN ET AL.
	<b>Examiner</b> CHRISTOPHER D. KOHARSKI	<b>Art Unit</b> 3763

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

- 1) Responsive to communication(s) filed on 19 February 2008.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

- 4) Claim(s) 77-86 and 109-148 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 77-86 and 109-148 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/27/208 has been entered.

### ***Response to Amendment***

Examiner acknowledges the reply filed 10/27/2008 in which claims 77, 109, 119, 128, and 137 were amended. **However, the amendments to claims 77, 109, and 119 were already present in the previously filed response on 08/27/2007, and claim 137 was not amended in any way that the Examiner can ascertain.** Currently claims 77-86 and 109-148 are pending for examination in this application.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 77, 80-86, 109, 112-116, 119, 122-125, 128, 130-134, 137-139, and 141-146 are rejected under 35 U.S.C 103(a) as being unpatentable over Bylsma (6,319,220) in view of Dotson, Jr. (4,274,411).

Regarding claims 77, 80-86, 109, 112-116, 119, 1212-125, 128, 130-134, 137-139, and 141-146, Bylsma discloses a method and device for aspirating fluid from an ocular region during a phacoemulsification procedure (cols 2, 30-70; col 3, ln 1-30) comprising aspirating (4) the ocular region via a pressure system (17, peristaltic pump) to the ocular region via fluid control device (10) while applying ultrasonic energy with a needle (34), capable of producing cavitation (Figures 7-9). Bylsma further discloses delivering modulated ultrasound (see Figures 6-7)(col 4, ln 10-40) using an ultrasound phacoemulsification hand piece (30) (Figure 1).

Bylsma meets the claim limitations as described above except for the specific fluid control device creating a pressure pulse system for aspiration.

However, Dotson, Jr. discloses a fluid operated ophthalmic irrigation and aspiration device.

Regarding claims 77, 80-86, 109, 112-116, 119, 122-125, 128, 132-134, 137-139, and 141-146, Dotson, Jr. discloses a fluid operated method and device for aspiration of the ocular region (see abstract) using modulated differential pressure pulses (pulse mode, moving from no vacuum to a the preset vacuum level, via control

29 and selector 30) via a fluid control device (Figures 1-3) (col 1, ln 50-67) (col 5, ln 15-55).

At the time of the invention, it would have been obvious to use the aspiration system of Dotson, Jr. with the system of Bylsma in order to provide a system that aids in the aspiration of hard to remove pieces of material (cols 1, ln 60-70) and the system of Dotson, Jr. is disclosed to be used with numerous types of hand piece systems (col 3, ln 1-20). The references are analogous in the art and with the instant invention; therefore, a combination is proper. Therefore, one skilled in the art would have combined the teachings in the references in light of the disclosure of Dotson, Jr. (cols 1-2).

***Claim Rejections - 35 USC § 103***

Claims 78-79, 85-86, 110-111, 117-118, 120-121, 126-127, 129-131, 135-136, 140-141 and 147-148 are rejected under 35 U.S.C 103(a) as being unpatentable over Bylsma (6,319,220) in view of Dotson, Jr. (4,274,411)

The modified Bylsma discloses the claimed invention except for the specific modulation pulse duration (100 milliseconds, 8 milliseconds, and 25, milliseconds).

Regarding claims 78-79, 85-86, 110-111, 117-118, 120-121, 126-127, 129-131, 135-136, 140-141 and 147-148, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the duration values as claimed by Applicant since the values as claimed lack criticality for the specific pulse times and duration and since Dotson, Jr. discloses the duration and pulse amounts can be varied to optimize removal of fragments (col 6, ln 20-60); additionally, it has been held that discovering an optimum value of a result effective variable involves only routine skill

in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). See Gonan (6,423,028) for representative example illustrating varied pulse durations (Figures 1-10, col 4).

***Response to Arguments***

Applicant's arguments filed 10/27/2008 have been fully considered but they are not persuasive. Applicant's Representative asserts that the combination of Bylsma in view of Dotson does not disclose the limitation such as "**applying modulated differential fluid pressure pulses**" and uses hindsight and is an improper combination of references.

Examiner has fully considered applicant's arguments but they are not persuasive. It is examiners position that given a careful reading, the claims do not distinguish over the prior art of record.

Examiner asserts that the references meet the claimed limitations of the pending claims. The Dotson, Jr. reference discloses applying modulated differential fluid pressure pulses via the vacuum control system described in column 2, lines 45-65. The pressure pulse is "modulated" in the pulsed mode (via selector 30) because the pressure is cycled on and off, and is "differential" because the pressure cycles up to a preset amount (via control know 29) from a zero pressure to a negative pressure and is thus changing. In response to Applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was

within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Regarding the combination or references, the Examiner has clearly articulated the reason (see above rejection) to which one of ordinary skill in the art would apply. Both references describe that the pulsed modes allow for optimal use and extraction of tissue. The Bylsma reference discloses a system with pulsed ultrasonic properties and the advantages thereof (cols 1-2), while the Dotson, Jr. reference discloses an aspiration system commonly used with ultrasound systems (35, col 1) with a pulsed aspiration mechanism and the advantages thereof (col 1, 60-70). It is well within the ordinary skill of the art to apply the pulsed vacuum system of Datson, Jr. to the system of Bylsma, as taught by each reference the benefits of pulsed actions provide superior operation whether it be in irrigation, ultrasound power, or vacuum control.

The prior art of record teaches all elements as claimed and these elements satisfy all structural, functional, operational, and spatial limitations currently in the claims. Therefore the standing rejections are proper and maintained.

***Suggested Subject Matter***

The following claim subject matter is suggested by the examiner and considered to distinguish patentably over the art of record in this application and is therefore presented to Applicant for consideration:

Examiner suggests further clarification to the pulse procedure or structural elements that define the aspiration components.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher D. Koharski whose telephone number is 571-272-7230. The examiner can normally be reached on 5:30am to 2:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Lucchesi can be reached on 571-272-4977. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Date: 01/13/2009

/Christopher D Koharski/  
Examiner, Art Unit 3763

/Nicholas D Lucchesi/  
Supervisory Patent Examiner, Art Unit 3763